AMENDMENTS TO THE CLAIMS

1. (currently amended) ~~Use of a substance having luteinising hormone activity (LH substance) in the manufacture of a pharmaceutical composition for use in a~~ A method of controlled ovarian hyperstimulation in a mammalian female, said method comprising the co-administration to said female of:

- a substance having follicle stimulating hormone activity (FSH substance) in an amount effective to stimulate multiple follicular development;
- gonadotropin releasing hormone (GnRH) antagonist in an amount equivalent to a daily subcutaneous dose of at least 0.5 mg ganirelix to prevent a premature LH-surge; and
- **a substance having luteinising hormone activity (LH substance)** ~~the LH substance~~ in an amount effective to prevent or suppress symptoms of luteinising hormone (LH) deficiency resulting from the administration of the GnRH antagonist;

followed by the administration of a meiosis and luteinisation inducing substance (ML substance) in an amount effective to stimulate resumption of meiosis and luteinisation, and wherein the LH substance is not obtained from the urine of human females.

2. (currently amended) **The method** ~~Use~~ according to claim 1, wherein the method additionally comprises the sequential steps of:

- harvesting one or more ova from mature ovarian follicles;
- fertilising one or more ova *in vitro*; **and**
- transferring the resulting embryo into the uterus of a mammalian female.

3. (currently amended) **The method** ~~Use~~ according to claim ~~1 or 2~~ 1, wherein the LH substance is administered in an amount effective to maintain the females blood serum concentration of LH substances at a level equivalent to more than 1 I.U. LH/litre~~, preferably at more than 1.2 I.U. LH/litre~~.

4. (currently amended) **The method** ~~Use~~ according to ~~any one of claims 1-3~~ **claim 1**, wherein the LH substance is administered in a daily dose which is equivalent to an subcutaneous dose of between 1 and 40 I.U.~~, preferably of between 2 and 15 I.U. recombinant LH per kg of bodyweight.~~

5. (currently amended) **The method** ~~Use~~ according to ~~any one of claims 1-4~~ **claim 1**, wherein the GnRH-antagonist is administered at least during the period starting with the moment

when the largest developing ovarian follicle has reached an average diameter of 14 mm~~, preferably of 12 mm, most preferably 10 mm~~ and ending one day prior to the administration of the ML substance in an amount effective to stimulate resumption of meiosis and luteinisation.

6. (currently amended) **The method** ~~Use~~ according to ~~any one of claims 1-5~~ **claim 1**, wherein the GnRH-antagonist is administered at least during the period commencing either 6 days after the start of administration of the FSH substance, or at least 4 days prior to the administration of the ML substance in an amount effective to stimulate resumption of meiosis and luteinisation, whichever is the earliest, and ending one day prior to said administration of the ML substance.

7. (currently amended) **The method** ~~Use~~ according to ~~any one of claims 1-6~~ **claim 1**, wherein the LH substance is administered at least during the period commencing 2 days after the start of administration of the GnRH antagonist and ending with the discontinuation of the administration of the GnRH antagonist.

8. (currently amended) **The method** ~~Use~~ according to ~~any one of claims 1-7~~ **claim 1**, wherein the FSH substance is administered at least during the period starting 8 days~~, preferably 6 days~~ after the female's spontaneous menses until the day before administration of the ML substance in an amount effective to stimulate resumption of meiosis and luteinisation.

9. (currently amended) **The method** ~~Use~~ according to ~~any one of claims 1-8~~ **claim 1**, wherein the GnRH antagonist is selected from the group consisting of ganirelix, cetrorelix, a precursor of ganirelix, a precursor of cetrorelix, or mixtures thereof.

10. (currently amended) **The method** ~~Use~~ according to ~~any one of claims 1-9~~ **claim 1**, wherein the GnRH antagonist is administered in an amount equivalent to a daily subcutaneous dose of 0.8-4.0 mg ganirelix.

11. (currently amended) **The method** ~~Use~~ according to ~~any one of claims 1-10~~ **claim 1**, wherein the LH substance is selected from the group consisting of recombinant LH, chimaeric or otherwise modified gonadotropins with LH-activity, low molecular weight compounds with LH activity and mixtures thereof.

12. (currently amended) **The method** ~~Use~~ according to ~~any one of claims 1-11~~ **claim 1**, wherein the LH substance used to prevent or suppress symptoms of LH deficiency is obtained from a recombinant cell line.

13. (currently amended) **The method** ~~Use~~ according to ~~any one of claims 1-12~~ **claim 1**, wherein the FSH substance, the GnRH antagonist and the LH substance are administered at least once a day, preferably parenterally.

14. (currently amended) A pharmaceutical kit comprising:

- at least one parenteral or oral dosage unit containing one or more FSH substances in an amount equivalent to a subcutaneous dose of 50-1500 I.U. FSH;
- at least one parenteral dosage unit containing one or more GnRH antagonists in an amount equivalent to a subcutaneous dose of 0.5-25 mg ganirelix; **and**
- at least one parenteral dosage unit containing one or more LH substances in an amount equivalent to a subcutaneous dose of 50-3000 I.U. recombinant LH;

wherein the LH substance is not obtained from the urine of human females.

15. (currently amended) **The pharmaceutical** ~~Pharmaceutical~~ kit according to claim 14, wherein the dosage unit containing one or more FSH substance, the dosage unit containing one or more GnRH antagonists and the dosage unit containing one or more LH substances are combined in a cartridge for once daily subcutaneous self-administration.

16. (new) The method according to claim 1, wherein the LH substance is administered in an amount effective to maintain the females blood serum concentration of LH substances at a level equivalent to more than 1.2 I.U. LH/litre.

17. (new) The method according to claim 1, wherein the LH substance is administered in a daily dose which is equivalent to an subcutaneous dose of between 2 and 15 I.U. recombinant LH per kg of bodyweight.

18. (new) The method according to claim 1, wherein the GnRH-antagonist is administered at least during the period starting with the moment when the largest developing ovarian follicle has reached an average diameter of 12 mm and ending one day prior to the administration of the ML substance in an amount effective to stimulate resumption of meiosis and luteinisation.

19. (new) The method according to claim 1, wherein the GnRH-antagonist is administered at least during the period starting with the moment when the largest developing ovarian follicle has reached an average diameter of 10 mm and ending one day prior to the administration of the ML substance in an amount effective to stimulate resumption of meiosis and luteinisation.

20. (new) The method according to claim 1, wherein the FSH substance is administered at least during the period starting 6 days after the female's spontaneous menses until the day before

administration of the ML substance in an amount effective to stimulate resumption of meiosis and luteinisation.